# **Meeting Minutes: 360 Designs**

# Call to order

A meeting of 360 Designs was held in the Engineering Design Suite on 10/24/2019. Attendees included Tanner Sloan, Jake Metter, Dr. Beyerlein, Philip, and Max.

## Agenda

#### **Old Business**

- 1. Review WebEx Meeting 2 with EPC.
- 2. Review Snapshot Day
- 3. Review/ discuss Engineering Notebook comments

#### New Business

- 1. Parts Ordered
  - a. Amazon Update
  - b. Unitronics Update
  - c. 58TP selection 1/4in bore to fit onto 6.35mm shaft? look at catalog selection
  - d. Switch from PLC to Computer for quick programming and then running
- 2. Random success routine ideas brainstorm
- 3. Upcoming class deadlines

## a. Turn in Design Validation Plan.

- b. Project Value Proposition: Due by Oct 31, 2019
- c. Draft Wikipage: Due by Nov 7, 2019
- 4. Future plans and expectations

## Reports

- Purchased linear actuator and stepper Motor via amazon on Wednesday the 23.
  - o Due to be delivered Friday the 25.

## Unfinished business

• N/A

#### New Business

- Ordered Stepper motor has a shaft out the back. The 58TP programmable encoder could attach directly to the stepper, without a coupler.
  - o Mark to email Trevin the exact model we need on Thursday night/Friday morning.
- Unitronics delivery due next Wednesday.
- We are presented with an issue of unplugging the encoder adapter cable constantly to program/run the encoder.
  - o Buy a splitter? Rewire our own cable? Mark to contact EPC for ideas/help/more cable.
    - Needs to wait until we have the PLC from Unitronics.
- Randomized success routines need to be implemented (discussed by EPC last meeting)
  - o 3-5 routines, 5 preferred
    - Distinctly different routines, or 1 routine with random outcomes like a roulette wheel
      - Tanner: guess a length and get a grade depending on the time it takes. Low resolution could provide a value to 1 sig fig, raise the resolution to get the next sig fig, and so on.
      - Mark: hit an exact distance (electrical contact), lower resolutions may be impossible, raise resolution to increase accuracy.
  - o Discussed roulette table as well as flashing different colored lights and playing different congratulatory sounds
- Upcoming dates:
  - o DVP submitted to Beyerlein in paper form.
  - o Wikipage workshop next Tuesday.
  - o PVP Due Oct 31

#### Announcements

• Mark will be out of town next Wednesday.

- Dr. Beyerlein will be out of town next Thursday, may or may not call in. Meeting location TBA, will need a laptop with a cam.
- Going to try to meet early next week to set up the linear actuator and motor and play around with it.

## Adjournment

The meeting was adjourned.

<u>Tanner Sloan - 10/10/2019</u>

Secretary